WHAT IS CLAIMED IS:

1. A fuel injection valve having an injection hole opened and shut by a valve element which moves in a direction of axis line, by which turn power around center axis line of said injection hole is given to fuel injected from the injection hole by a fuel turn means,

wherein the center axis line of said injection hole is inclined with respect to the center axis line of said valve element by the fixed deflection angle, and

wherein the step difference is formed on the pointed end of said injection hole.

2. A fuel injection valve according to claim 1, wherein the step difference on the pointed end of said injection hole is mutually parallel to the plane with the arbitrary tilt angle with respect to the center axis line of said injection hole.

3. A fuel injection valve according to claim 1 or 2, wherein the pointed end of said injection hole is a cutting work side or a press working side.

4. A cylinder injection internal combustion engine provided with a fuel injection valve according to any one of claims 1 to 3.

5. A method of manufacturing a fuel injection valve having an injection hole opened and shut by a valve element which moves in a direction of axis line, by which turn power around center axis line of said injection hole is given to fuel injected from the injection hole by a fuel turn means, the center axis line of said

injection hole inclining with respect to the center axis line of said valve element by the fixed deflection angle, and the step difference being formed on the pointed end of said injection hole,

wherein the first product is made by setting the length of the axis of said injection hole to the length of the axis which has the adjustment margin, and

wherein the second products are made by processing the pointed end of said injection hole of said the first product, and adjusting the length of the axis of said injection hole, the step difference form of the pointed end of said injection hole and the direction of the step difference to the deflection direction of said injection hole.

6. A method of manufacturing the fuel injection valve according to claim 5, wherein the processing on the pointed end of said injection hole is carried out by the cutting work or press working.